CLAIMS

What is claimed is:

1.   A method of recording data on an optical disc in an Incremental Recording mode in which data is partially recordable, the method comprising:

determining whether the optical disc is formatted and recording data on the optical disc upon determining that the optical disc is not formatted;

checking a state of the optical disc in a recording management area in which disc information is recorded; and

erasing, after the checking of the state, data ranging from a next writable address to a predetermined block upon determining that the optical disc is a Minimal Blank disc in which data is erased from the recording management area to a lead-in area.

2.   The method of claim 1, wherein the determining further comprises outputting a recording error message upon determining that the optical disc is formatted.

3.   The method of claim 1, wherein the erasing comprises recording, after the checking of the state, data from a next address upon determining that the optical disc is a Minimal Blank disc in which data is erased from the recording management area to a lead-out area.

4.   A computer readable medium encoded with processing instructions for implementing a method of recording data on an optical disc in an Incremental Recording mode in which data can be partially recorded, the method comprising:

determining whether or not the optical disc is formatted and recording data on the optical disc upon determining that the optical disc is not formatted;

checking a state of the optical disc in a recording management area in which disc information is recorded; and

erasing, after the checking step, data ranging from a next writable address to a predetermined block upon determining that the optical disc is a Minimal Blank disc in which data is erased from the recording management area to a lead-in area.

5.   A method of recording data on an optical disc in an Incremental Recording mode, the method comprising:

determining whether the optical disc is formatted;

partially recording data to the optical disc at a desired position upon determining that the optical disc is not formatted;

checking whether the optical disc is Fully Blanked or Minimally Blanked after the partial recording step;

erasing, after the checking, data from a portion of the optical disc that may lead to a recording or read out error upon determining that the optical disc is Minimally Blanked; and

recording the remaining data at the desired address on the optical disc after the erasing step.

6.   The method of claim 5, wherein the checking comprises checking a recording management area to determine whether the disc is Fully Blanked or Minimally Blanked.

7.   The method of claim 5, wherein data ranging from a next writable address to a predetermined block is erased in said erasing.

8.   The method of claim 5, further comprising a step of outputting an error message upon determining that the optical disc is formatted.

9.   The method of claim 5, further comprising a step of recording, after the checking step, data from a next address upon determining that the optical disc is Minimally Blanked.

10.   An apparatus for recording data on a Minimally Blanked optical disc in an Incremental Recording mode, the apparatus comprising:

a data eraser/recorder that, in response to a signal, records first data to a desired portion of the optical disc or erases data from a portion of the optical disc that may lead to a recording or read out error; and

a controller that determines whether the optical disc is formatted or unformatted, outputs a signal to the data eraser/recorder to partially record the first data to the optical disc upon determining that the optical disc is not formatted, determines whether the optical disc is fully blanked or minimally blanked,

wherein, after the data eraser/recorder partially records data to the optical disc, the controller outputs a signal to the data eraser/recorder to erase second data from a portion of the optical disc that may lead to a recording or read out error upon determining that the disc is minimally blanked, and outputs a signal to the data eraser/recorder to record a remaining portion of the first data if upon determining that the disc is fully blanked or if after the second data is erased.

11.   The apparatus of claim 10, wherein the desired portion of the disc is designated by a write start address and the portion of the optical disc from which second data is erased is the next writable address to a predetermined block.

12.   The apparatus of claim 10, wherein the controller checks a value designated at a Field 0 of a recording management area of the optical disc to determine whether the optical disc is formatted or unformatted.

13.   The apparatus of claim 10, wherein the second data is one error correction code block from a next writable address.